

REMARKS

Claims 1, 4-10 and 23-35 are pending in the application.

Claim 1 is allowed.

Claims 4-10 were objected to.

Claims 23-26 were rejected under 35 U.S.C. 102(e).

Claims 1, 4, 5, 7 and 23-25 are amended.

Claims 27-35 are added.

No new matter is added.

Applicants request reconsideration and allowance of the claims in light of the above amendments and following remarks.

Allowable Subject Matter

Claim 1 is allowed.

Claim Objections

Claims 4-10 were objected to under 37 CFR 1.75(c), as being of an improper dependent form for failing to further limit the subject matter of a previous claim.

Claims 4, 5 and 7 are currently amended to correct their respective dependency to claim

1. These claims, and claims 6, 8 and 9, are now in proper form and, being dependent on an allowed claim, in condition for allowance.

Claim Rejections - 35 U.S.C. § 102

Claims 25 and 26 were rejected under 35 U.S.C. § 102(e) as being allegedly anticipated by U.S. Patent No. 6,534,374 issued to Johnson, et al (hereinafter “Johnson”). Applicants respectfully traverse this rejection.

Amended claim 25 recites, among other elements, “after patterning the dielectric layer, forming an upper electrode....” Support for this amendment can be found at, for example, FIG. 29 of the specification as originally filed. Applicants respectfully submit that Johnson fails to teach at least this element as now recited in claim 25.

Specifically, Johnson teaches wherein the metal top plate 32’ is formed before the dielectric insulator layer 30 is patterned to form trench shape 44. See Johnson, FIGS. 5-9.

Because the metal top plate 32' of Johnson is formed before the dielectric insulator layer 30 is patterned to form the trench shape 44, Johnson cannot teach forming the metal top plate 32' after patterning the dielectric insulator layer 30 to form trench shape 44. Moreover, Johnson lacks any suggestion that forming the metal top plate 32' after patterning the dielectric insulator layer 30 would be obvious. Accordingly, Applicants respectfully submit that Johnson does not teach or suggest each and every element recited in amended claim 25. See M.P.E.P. §§ 2131, 2143.03.

For at least the reasons provided above, Applicants submit that amended claim 25 is not anticipated, nor rendered obvious, by Johnson and, therefore, that claim 25 is in condition for allowance.

Claims 26-28 depend from claim 25 and, therefore, include all of the elements recited in claim 25. Accordingly, Applicants submit that claims 26-28 are in condition for allowance for at least the same reasons given with respect to the rejection of claim 25.

Claims 23 and 24 are rejected under 35 U.S.C. § 102(e) as being allegedly anticipated by U.S. Patent No. 6,784,478 issued to Merchant, et al (hereinafter "Merchant"). Applicants respectfully traverse this rejection.

Amended claim 23 recites, among other elements, "forming an upper electrode, wherein the upper electrode overlaps the lower electrode and is within the contact hole." Support for this amendment can be found at, for example, FIG. 29 of the specification as originally filed. Applicants respectfully submit that Johnson fails to teach at least this element as now recited in claim 23.

For example, Merchant shows in FIGS. 4-6 wherein a top capacitor plate 34 is formed on a dielectric layer 32 and then a vertical via for a conductive via 44 is formed to extend downwardly through the top capacitor plate 34, the dielectric layer 32, and a barrier layer 28 to expose the conductive runner 19. Because the vertical via is formed through the top capacitor plate 34, the top capacitor plate 34 of Merchant cannot be formed within the vertical via as required by claim 23. Moreover, Merchant lacks any suggestion that forming the top capacitor plate 34 within the vertical via would have been obvious. Accordingly, Applicants respectfully submit that Merchant does not teach or suggest each and every element recited in amended claim 23. See M.P.E.P. §§ 2131, 2143.03.

Amended claim 24 recites elements similar to those found in amended claim 23. Accordingly, arguments presented above with respect to the rejection of claim 23 are also applicable with respect to the rejection of claim 24.

For at least the reasons provided above, Applicants submit that amended claims 23 and 24 are not anticipated, nor rendered obvious, by Merchant and, therefore, that the claims are in condition for allowance.

Claims 29 and 30 depend from claims 23 and 24, respectively, and therefore include all of the elements recited in claims 23 and 24. Accordingly, Applicants submit that claims 29 and 30 are in condition for allowance for at least the same reasons given with respect to the rejection of claims 23 and 24.

New Claims

Support for new claims 27-35 can be found at, for example, FIG. 29 of the specification as originally filed.

New claim 27 recites elements similar to those found in amended claim 25. Accordingly, claim 27 is in condition for allowance for at least the same reasons presented above with respect to the rejection of claim 25.

New claim 30 recites elements similar to those found in amended claim 23. Accordingly, claim 30 is in condition for allowance for at least the same reasons presented above with respect to the rejection of claim 23.

New claim 32 recites elements similar to those found in amended claim 23. Accordingly, claim 32 is in condition for allowance for at least the same reasons presented above with respect to the rejection of claim 24.

CONCLUSION

For the foregoing reasons, Applicants request reconsideration and allowance of the claims of the application as amended. The Examiner is encouraged to telephone the undersigned at (503) 222-3613 if it appears that an interview would be helpful in advancing the case.

Respectfully submitted,

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